

WHAT IS CLAIMED IS:

1. A protocol-independent system for processing wireless calls, comprising a plurality of logic engines, each comprising:
  - a generic logic control state machine operable to execute a logic control  
5 program to process a call event;
  - a codec specialized in a wireless network protocol of a network and operable to parse and format messages from the network according to the wireless network protocol; and
  - a filter operable to filter and route messages from the codec to the logic  
10 control state machine.
2. The system, as set forth in claim 1, wherein the codec in at least one of the plurality of logic engines is operable to parse and route one of the group selected from AMPS signaling messages, CDMA signaling messages, GSM signaling  
15 messages, and TDMA signaling messages.
3. The system, as set forth in claim 1, wherein the codec in at least one of the plurality of logic engines is operable to interface with one of the group selected from a GSM base station, a W-CDMA radio gateway, a W-TDMA radio gateway, a  
20 GPRS radio gateway, and a GSM receiver, a CDMA receiver, a TDMA receiver, and an AMPS receiver.
4. The system, as set forth in claim 1, further comprising a codec in at least one of the plurality of logic engines operable to parse and route one of the group  
25 selected from H.323 signaling messages and SS7 signaling messages.
5. The system, as set forth in claim 1, wherein the state machine in at least one of the plurality of logic engines is further operable to access a database that includes routing and verification information related to the call event and to route the  
30 call event in response to the information.

6. The system, as set forth in claim 5, wherein the state machine in the at least one of the plurality of logic engines is operable to route the call event using voice over IP.

5 7. The system, as set forth in claim 1, wherein the call event includes data selected from the group consisting of voice, video, and IP data.

8. The system, as set forth in claim 1, wherein the state machine in at least one of the plurality of logic engines is operable to allocate an RF channel that  
10 may be used for the call event without seizing the RF channel.

9. A protocol-independent system for processing a wireless call event, comprising:

at least one control agent having

a first generic logic control state machine operable to execute a first logic control program to process a signaling message;

a first signaling codec specialized in a particular wireless signaling protocol and operable to parse and format the signaling messages; and

a first filter operable to filter and route the signaling messages from the codec to the first logic control state machine;

at least one mobility management agent having

a second generic logic control state machine operable to execute a second logic control program to process a control protocol message;

a second codec specialized in a particular wireless control protocol and operable to parse and format the control protocol messages; and

a second filter operable to filter and route the control protocol messages from the codec to the second logic control state machine; and

at least one intelligence control agent having

a third generic logic control state machine operable to execute a third logic control program to process call events received from the mobility management agent and the control agent; and

access to a database, the database including routing and verification information related to the call event.

10. The system, as set forth in claim 9, wherein the intelligence control agent is operable to parse and route one of the group selected from AMPS signaling messages, CDMA signaling messages, GSM signaling messages, and TDMA signaling messages.

11. The system, as set forth in claim 9, wherein the second codec is operable to interface with one of the group selected from a GSM base station, a W-CDMA radio gateway, a W-TDMA radio gateway, a GPRS radio gateway, and a GSM receiver, a CDMA receiver, a TDMA receiver, and an AMPS receiver.

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12. The system, as set forth in claim 9, wherein the intelligence control agent is further operable to access a database that includes routing and verification information related to the call event and to route the call event in response to the information.

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13. The system, as set forth in claim 12, wherein the mobility management agent is further operable to route the call event using voice over IP.

14. The system, as set forth in claim 9, wherein the control agent further includes another codec operable to parse and route one of the group selected from H.323 signaling messages and SS7 signaling messages.

15. The system, as set forth in claim 9, wherein the second codec is operable to allocate an RFD channel that may be used for the call event without seizing the RF channel.

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16. A method for wireless call processing, comprising:  
downloading at least one function-specific logic control program into each of  
a plurality of generic logic control state machines;  
receiving a message at a wireless protocol-specific codec, parsing the  
5 message, and routing the message to a first logic control state machine associated with  
the protocol-specific codec;  
executing the function-specific logic control program of a first logic control  
state machine and generating a call event;  
routing the call event to an event codec; and  
10 executing the function-specific logic control program of a second logic control  
state machine and processing the call event.

17. The method, as set forth in claim 16, further comprising allocating an  
RF channel that may be used for the call event without seizing the RF channel.

18. The method, as set forth in claim 16, further comprising:  
accessing a database, the database including routing and verification  
information related to the call event; and  
routing the call event in response to the information.

19. The method, as set forth in claim 16, further comprising the protocol-  
specific codec parsing and routing one of the signaling messages selected from the  
group consisting of AMPS signaling messages, CDMA signaling messages, and  
TDMA signaling messages.

20. The method, as set forth in claim 16, further comprising the protocol-  
specific codec interfacing with one of the group selected from a GSM base station, a  
W-CDMA radio gateway, a W-TDMA radio gateway, a GPRS radio gateway, and a  
GSM receiver, a CDMA receiver, a TDMA receiver, and an AMPS receiver.

